

SW VGA Switcher Series

Two, Four, and Six Input VGA and Stereo Audio Switchers



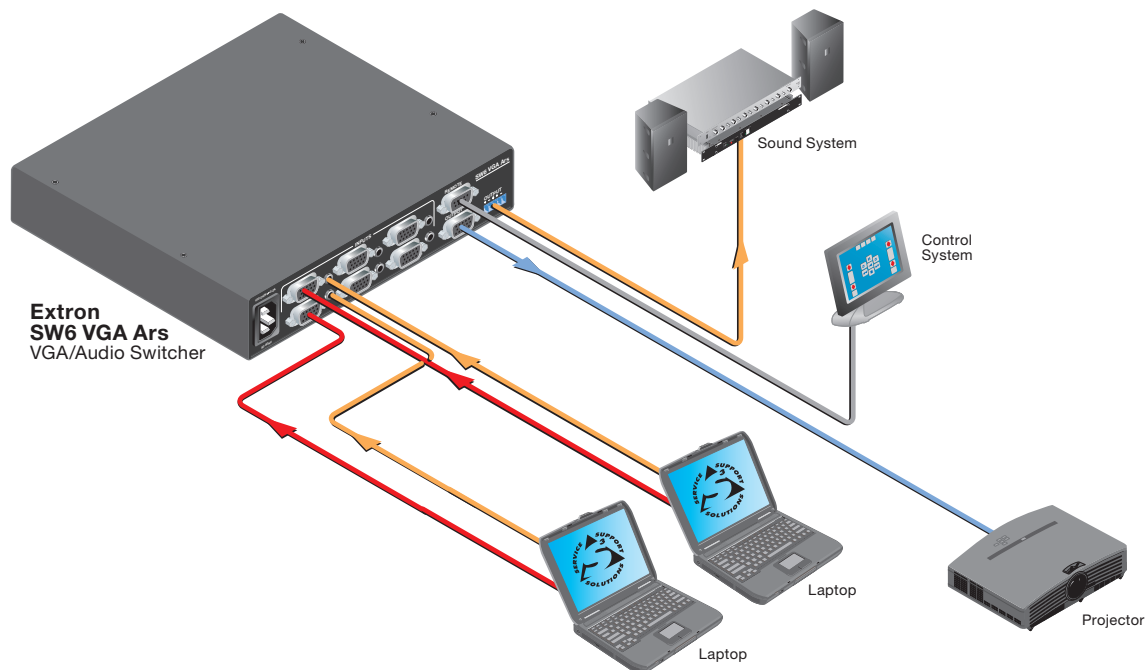
COMMON FEATURES

- Inputs: Two, four, and six input models with 15-pin HD connectors; 3.5 mm stereo mini jacks for audio
- Output: One 15-pin HD connector for video; one captive screw connector for audio
- 350 MHz (~3 dB) RGB video bandwidth
- Compatible with VGA-QXGA and HDTV component video signals
- Autoswitching capabilities
- Automatically detects which inputs have an active signal and reports this information through the RS-232 port
- RS-232 and contact closure remote control
- Internal international power supply
- 1U, half rack width metal enclosure

DESCRIPTION

The Extron **SW VGA Series** are active switchers utilizing 15-pin HD connectors. There are six switchers in the series. The **SW2 VGArS**, **SW4 VGArS**, and **SW6 VGArS** are two, four, and six input, one output switchers that allow multiple VGA-QXGA computer inputs to be switched to one compatible display. The **SW2 VGA Ars**, **SW4 VGA Ars**, and **SW6 VGA Ars** are also two, four, and six input, one output VGA and audio switchers, but also include several audio features such as active PC audio interfacing which accepts unbalanced computer-generated stereo audio input signals on 3.5 mm stereo mini jacks and outputs balanced line level stereo audio on a captive screw connector.

The SW VGA switchers are user-configurable for manual or autoswitching modes. The autoswitch function can be enabled or disabled via the front panel buttons. Autoswitching allows any input of the switcher to be selected automatically when the switcher detects a sync signal. The 9-pin female D connector enables RS-232 control, as well as contact closure control, and is compatible with the Extron KP 6 Keypad Remote Control and the Extron IR 102 Kit IR remote. All of the SW VGA models are 1U, half rack width metal enclosures that will fit into an optional Extron 1U Universal Rack Shelf Kit.



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SW VGA Switcher Series

SW VGArS

VGA Switchers

UNIQUE FEATURES

- Switches VGA-QXGA signals on 15-pin HD connectors



SW6 VGArS

MODEL	VERSION DESCRIPTION	PART #
SW2 VGArS	Two Input VGA	60-257-02
SW4 VGArS	Four Input VGA	60-258-02
SW6 VGArS	Six Input VGA	60-259-02

SW VGA Ars

VGA and Stereo Audio Switchers

UNIQUE FEATURES

- Switches VGA-QXGA and stereo audio signals on 15-pin HD connectors and 3.5 mm stereo mini jacks
- Active PC audio to balanced audio interfacing



SW6 VGA Ars

MODEL	VERSION DESCRIPTION	PART #
SW2 VGA Ars	Two Input VGA & Audio	60-257-22
SW4 VGA Ars	Four Input VGA & Audio	60-258-22
SW6 VGA Ars	Six Input VGA & Audio	60-259-22

SW VGA Switcher Series Accessories

OPTIONAL ACCESSORIES	MODEL DESCRIPTION	PAGE	PART #
RSU 129	1U 9.5" Deep Universal Rack Shelf Kit	page 819	60-190-01
CCR 204	Four-Button Contact Closure Remote	page 277	60-794-02
CCR 306	Six-Button Contact Closure Remote	page 278	60-795-02
KP 6	Keypad Remote Control For Use With 9-pin Contact Closure Port.	page 279	60-111-20
VSW I AAP	Remote Input and Control Panel AAP - Architectural Adapter Plate for VSW 2VGA A Switcher & SW VGA Series Switchers	page 277	70-529-11
IR 102 Remote Control Kit	IR to RS-232 or Contact Closure Conversion Kit	page 271	70-224-01
CSR 6	Captive Screw to RCA Female Audio Adapter	page 796	26-575-01

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SW VGA Switcher Series

SPECIFICATIONS

VIDEO

Gain	Unity
Bandwidth	350 MHz (-3 dB)
Crosstalk	-68 dB @ 10 MHz

VIDEO INPUT

Number / Signal type	2, 4, or 6 (depending on the model) VGA-UXGA RGBHV, RGBS, RGSB, RsGsBs computer video, and HDTV component video
Connectors	2, 4, or 6 (depending on the model) 15-pin HD female
Nominal level	1.0 Vp-p for Y of component video
Minimum / Maximum levels	0.7 Vp-p for RGB and for R-Y and B-Y of component video
Impedance	Analog: 0.3 V to 1.5 Vp-p with no offset
Horizontal frequency	75 ohms
Vertical frequency	15 kHz to 145 kHz
Return loss	30 Hz to 170 Hz
Input coupling	-40 dB @ 5 MHz
	DC

VIDEO OUTPUT

Number / Signal type	1 VGA-UXGA RGBHV, RGBS, RGSB, RsGsBs computer video, and HDTV component video
Connectors	(1) 15-pin HD female
Nominal level	1.0 Vp-p for Y of component video
Minimum / Maximum levels	0.7 Vp-p for RGB and for R-Y and B-Y of component video
Impedance	3.0 V to 1.5 Vp-p (follows input)
Return loss	75 ohms
DC offset	-43 dB @ 5 MHz
	±5 mV maximum with input at 0 offset

SYNC

Input type	RGBHV, RGBS, RGSB, RsGsBs, bi-level and tri-level sync on Y
Output type	RGBHV, RGBS, RGSB, RsGsBs, bi-level and tri-level sync on Y, follows input
Input level	1.0 V to 5.0 Vp-p
Output level	TTL: 5.0 Vp-p (unterminated)
Input impedance	510 ohms
Output impedance	75 ohms
Max. propagation delay	32 ns
Max. Rise / Fall time	4.7 ns
Polarity	Positive or negative (follows input)

AUDIO (SW 2/4/6 VGA ARS MODELS ONLY)

Gain	Unbalanced output: +6 dB; balanced output: +12 dB
Frequency response	20 Hz to 20 kHz, ±0.05 dB
THD + Noise	0.01% @ 1 kHz at nominal level
S/N	>90 dB at maximum output (unweighted)
Crosstalk	-45 dB @ 20 kHz, -72 dB @ 1 kHz or below 60 Hz
Stereo channel separation	>80 dB @ 20 Hz to 20 kHz

AUDIO INPUT (SW 2/4/6 VGA ARS MODELS ONLY)

Number / Signal type	2, 4, or 6 (depending on the model) stereo, unbalanced
Connectors	2, 4, or 6 (depending on the model) 3.5 mm female stereo mini jacks; tip (L), ring (R), sleeve (Gnd)
Impedance	>10k ohms unbalanced, DC coupled
Nominal level	-10 dBV (316 mV)
Maximum level	+14 dBV, (unbalanced) at 1% THD+N

NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV = 2 dBu

AUDIO OUTPUT (SW 2/4/6 VGA ARS MODELS ONLY)

Number / Signal type	1 stereo, balanced/unbalanced
Connectors	(1) 3.5 mm captive screw connector, 5 pole
Impedance	50 ohms unbalanced, 100 ohms balanced
Nominal level	+4 dBu (1.23 V), balanced
	-4 dBV (0.63 V), unbalanced
Maximum level (Hi-Z)	+28 dBu, balanced; +20 dBV, unbalanced at 1%THD+N
Maximum level (600 ohm)	+21 dBm, balanced; +18 dBm, unbalanced at 1%THD+N

CONTROL / REMOTE — SWITCHER

Serial control port	RS-232 9-pin female D connector (shared with contact closure)
Baud rate and protocol	9600 baud, 8 data bits, 1 stop bit, no parity
Serial control pin configurations	2 = TX, 3 = RX, 5 = GND
Contact closure	RS-232 9-pin female D connector (shared with RS-232)
Contact closure pin configurations	1 = input #1, 4 = input #2, 6 = input #3, 7 = input #4, 8 = input #5, 9 = input #6; active when a pin momentarily shorts to ground
“Show Me” contact closure	Pin 5 of each VGA input connector. The input is active (selected) when pin 5 momentarily goes to +5 V. (This applies only to units with firmware version 2.00 or higher.)
Program control	Extron's control/configuration program for Windows® Extron's Simple Instruction Set (SIS™)

GENERAL

Power	100 VAC to 240 VAC, 50/60 Hz, 10 watts, internal, universal
Temperature / Humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Rack mount	Yes, with optional 1U, 9.5" deep rack shelf, part #60-190-01 (RSU 129) or 60-604-01 (RSB 129) Also furniture mountable with optional under-desk mounting kit, part #70-077-01 (MBU 125), or through-desk mounting kit, part #70-077-02 (MBD 129)
Enclosure type	Metal
Enclosure dimensions	1.75" H x 8.75" W x 9.5" D (1U high, half rack wide) 4.4 cm H x 22.2 cm W x 24.1 cm D (Depth excludes connectors.)
Product weight	2.5 lbs (0.5 kg)
Shipping weight	5 lbs (3 kg)
Vibration	ISTA 1A in carton (International Safe Transit Association)
Listings	UL, CUL
Compliances	CE, FCC Class A, VCCI, AS/NZS, ICES
MTBF	30,000 hours
Warranty	3 years parts and labor

NOTE: All nominal levels are at ±10%. Specifications are subject to change without notice.